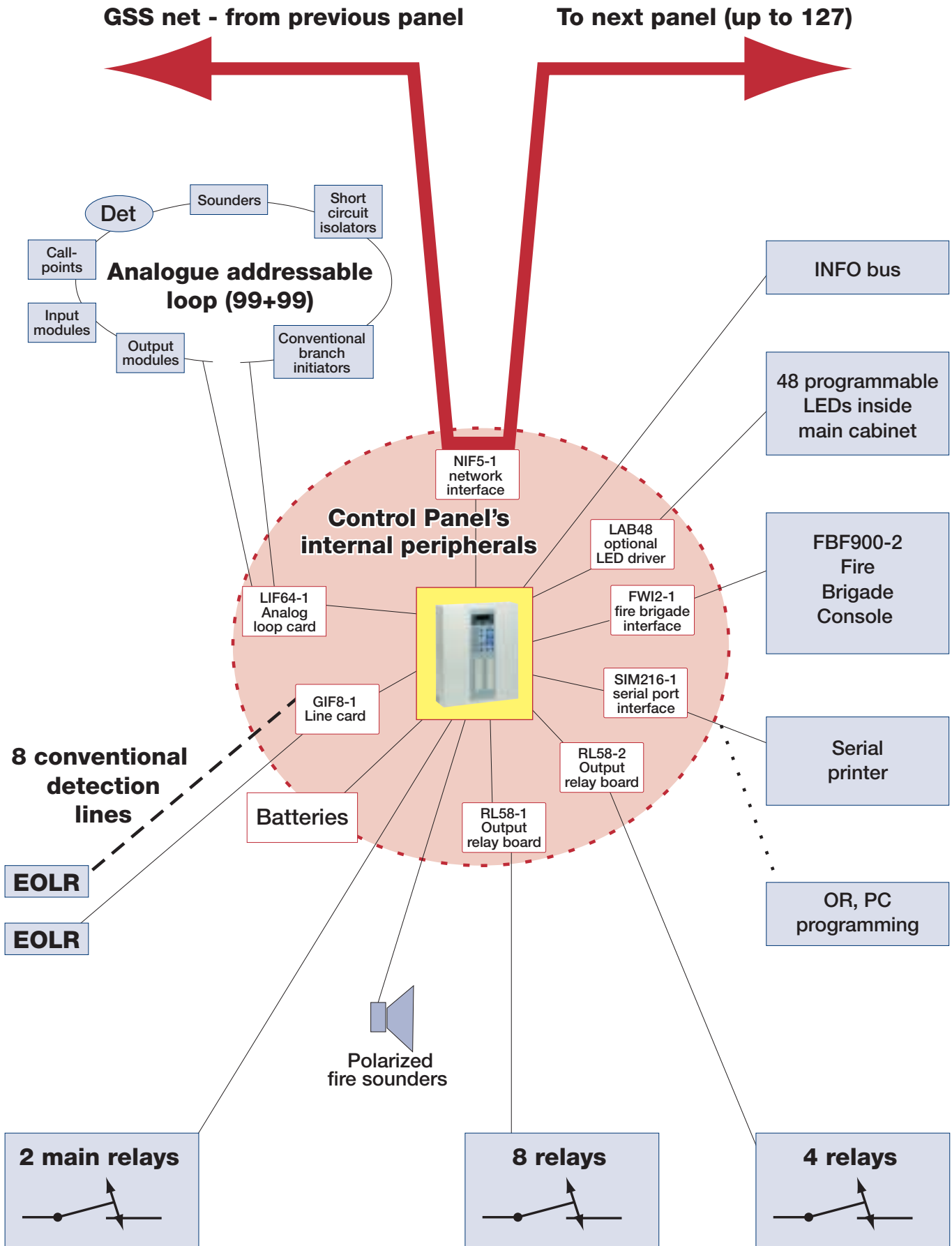


# Analogue Addressable Fire Products



# Logical System Structure



## Algorinet BC216-1 Analogue Addressable Fire Control Panel

The Algorinet BC216-1 is a technologically advanced fire control panel, utilising the latest in digital technology. Together with an extended range of compatible accessories, it meets the requirements of most of today's fire systems.

### Features

- Modern 32-bit design with modular architecture.
- Flash memory allowing "soft" firmware updates.
- Uploadable language version means one stock for all languages.
- Rich, user friendly diagnostic and functional menu.
- Dirt compensation in analogue detectors with automated reporting and maintenance planning functions.
- Support for industry's leading smoke detectors, both analogue addressable and conventional, latest lines from System Sensor.
- Easy system expansion by means of plug-in modules.
- Large premises can be protected by means of networking of up to 127 panels.
- Easy downloading PC software ParSoft enables quick and error free programming.
- User defined commands for complex logic procedures.
- System remains essentially functional even after a total CPU failure.
- Remote programming via a dial up modem connection.
- Direct PS/II type computer keyboard socket makes on-site programming very easy, without the need of a computer.
- Auto-recognition and default set-up of installed expansion modules and loop components.
- Compact size and low power consumption.
- Direct support of Fire Brigade Interface.
- Automatic adjustment of daylight savings time.
- Timer controlled manned/unmanned operation with two-stage alarming.
- Perfect electrical design allows for the use of unshielded cabling throughout.
- Microprocessor controlled, real load battery test.



### Specifications

Microprocessor	: 32 bit
Memory	: flash
Event log	: 500 positions
Power supply	: intelligent switching type
Display	: backlit, 4 lines by 20 characters
Audio-visual	: buzzer and system LEDs
Synoptical annunciation	: optional, fully programmable drivers for 48 and 512 LEDs
Sounder loops	: one supervised polarised alarm loop; up to 18 non-supervised alarm outputs
Detection loops	: up to 16 conventional EOLR loops (2 cards with 8 loops) up to 2 analogue addressable loops (99 detectors and 99 modules each) mixed system - 8 conventional and 1 analogue 99+99 loop
Software zones	: up to 144 zones per panel
Expanded configuration	: ring-bus network of 127 panels.
Outputs	: 2 built-in standard relays and 16 O.C. outputs 2 additional relay outputs on fire brigade module up to 16 additional relays on RL58 cards up to 198 outputs on loop modules
Ports	: one slot for optional 9-pin RS-232 port for a printer or a PC one slot for optional 9-pin RS-232 port for a printer or a network interface
Backup power supply	: space allows for 2 internal batteries of max. 20 Ah/12 V (for more batteries, an add-on external cabinet is required).
INFO Bus	: 20 mA communication loop for connecting up to 8 external devices like: remote display, remote console, Synoptical drivers, etc.
Battery temperature comp.	: one internal measurement circuit, input for one remote cabinet probe

### Electrical

Mains voltage	: 230 VAC +10/-15%, 50 Hz
Power	: 60 VA
Output voltage	: 28 VDC
Consumption	: 75 mA (without expansion modules)
Max. battery capacitance	: 34 Ah (to be connected)
Max. charging current	: 1.5 A

### Physical

Box	: sheet steel, powder coated, beige RAL9002
IP rating	: 30
Dimensions	: 520 mm x 420 mm x 120 mm (h x w x d)
Weight	: 6 kg (without batteries)
Operating temperature	: -5°C to 50°C
Relative humidity	: 95%, non-condensing

## Algorinet BC216-3 Analogue Addressable Slave Fire Control Panel

The Algorinet BC216-3 slave panel can host up to 2 loop modules and includes:

- A "blind" cabinet.
- NIF5-1 network card.
- Switching type PSU.
- CPU board.

## Panel Accessories

### LIF64-1 Analogue Addressable Loop Expansion Card

#### Features

- One detection loop of dialogue type, compatible with System Sensors' analogue addressable devices.
- Separate loop initiation terminals and end terminals.
- Detector's LED flashing is programmable.
- Self-diagnostic of faults.
- Self-detection of devices.
- Programmable double-knock alarm verification.
- Short circuit protection (built-in isolators).

#### Specifications

Maximum cable length	: unshielded twisted pair 1 mm <sup>2</sup> - 2000 m
Consumption	: 25 mA, plus 300 µA per every addressable point connected
Line voltage	: approx. 29 VDC
Line resistance	: max. 50 Ohm per core
Max. cable size	: 2.5 mm <sup>2</sup> (single wire)
Max. cable capacitance	: 400 nF

### GIF8-1 Conventional EOLR Detection Loop Expansion Card

#### Features

- The GIF8-1 conventional detector interface can be employed for the connection of conventional detectors.
- Up to 8 detector lines, each comprising one detector zone in conventional technology, can be connected to this module.
- Double-knock verification available on individual lines as well as between zones.
- Short circuit protection.
- Compatible with all System Sensors' two-wire conventional detectors.
- Compatible with manual call-points, e.g. WR2001SR.

#### Specifications

Maximum cable length	: unshielded twisted pair 1 mm <sup>2</sup> - 2000 m
EOL resistance	: 5.6 kOhm @ Ω W
Series resistance in the base	: 1 kOhm @ Ω W
Consumption	: 50 mA
Line voltage	: 20 VDC
Line resistance	: max. 50 Ohm per core
Max. cable size	: 1.5 mm <sup>2</sup> (single wire)

### NIF5-1 Networking Interface Card

This optional interface can be connected directly to the second serial slot in the BC216 fire control panel. It has a built-in proprietary version of RS-485 communication drivers, allowing for 38 kbps communication between panels on a ring data bus. The maximum distance between the network nodes is 1200 m. The NIF5-1 remains functional as a node even after panel failure. Redundant paths are programmable, as well as data exchange between panels.

Consumption	: board 1 mA
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### FWI2-1 Fire Brigade Interface

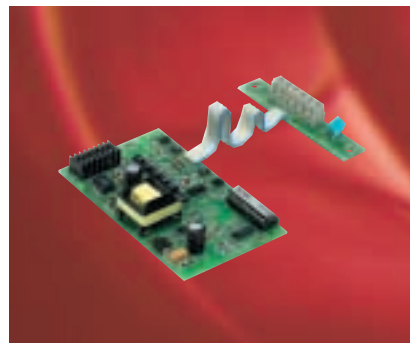
The FWI2-1 plug-in card enables interfacing between the control panel and a dedicated universal fire brigade operator console. It meets to the demand of Austrian, German, Swiss and Dutch fire brigades, and becomes increasing popular elsewhere in Europe. Non-monitored inputs and outputs can receive commands from the Fire Brigade Console, as well as serve for driving a telephone or radio communicators, strobes and sounders.

#### Specifications

Power consumption	: 4 mA, plus 20 mA per each activated relay
Relay outputs	: 2 relays 60 VDC / 1 A / 30 W
Open collector outputs	: 9 OC, max. current 35 mA
Inputs	: 9 (3 earth activated and 6 activated by 24 V)

### FWZ2-1 Fire Brigade Interface Additional Board

The additional FWZ2-1 fire brigade interface board fits onto the FWI2-1 interface. It is provided for the line-monitored connection of a transmitting device. With this additional board it is possible to accomplish two independent outputs for transmitting devices (e.g. for alarm and/or fault signals) which are monitored for interruption and short circuit. Some regulations require that the connection to the fire brigade console is EOL monitored.



### LAB48-1 Synoptical LED Display Field

This driver module can control 48 LEDs with fully programmable response.  
The LEDs can be mounted into the cover of the main cabinet, or at a remote Synoptical board.  
Power consumption : 2 mA plus 0.25 mA per every lit diode

### SIM216-1 Serial Interface Module

A plug-in printed circuit with a standard RS-232-C, 9-pin connector, Galvanically isolated. It can serve as a PC downloader link (also via modem) or as a printer serial port. Maximum two serial port modules can be plugged-in if a printer must always be on-line and print in real time. In a network configuration of panels, only one SIM216-1 module can be connected.

Baud rate : 1200 to 57600 bps.  
Pin-outs : Rx, Tx, CTS/DTR  
Consumption : 10 mA

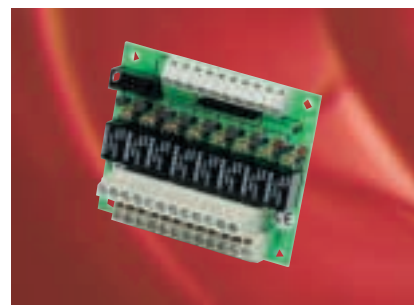


### RL58-1 Eight Output Relay Expansion Card

The RL58-1 is connected to the driver output from the intelligent power supply. Each relay is a changeover type and can be freely programmed in the control panel. Each relay can also be controlled via a hardware input. Each relay has a follower LED for indication of state.

#### Specifications

Number of outputs : 8 relay outputs  
Contact rating DC : 60 V / 1 A / 30 W  
Unloaded life expectancy : 5 million cycles  
Loaded state life expectancy : 300.000 cycles (24 VDC / 1 A)  
Consumption : • board 1 mA  
                  • each active relay 22 mA



### RL58-2 Four Output Relay Expansion Card

The RL58-2 is connected to the driver output from the intelligent power supply. Each relay is a changeover type and can be freely programmed in the control panel. Two boards can be connected in a daisy-chain mode for expansion to 8 relays in total per connector. 16 Relays in total per panel.

#### Specifications

Number of outputs : 4 relay outputs  
Contact rating AC : 8 A / 1250 VA  
Contact rating DC : 30 V / 3 A or 60 V / 1 A  
Unloaded life expectancy : 20 million cycles  
Loaded state life expectancy : 400.000 cycles (220 VAC / 3 A)  
Consumption : • board 1 mA  
                  • each active relay 22 mA



## Addressable Accessories

### M500ME Analogue Addressable Monitor Module

The M500ME monitor module is designed to interface to contact devices such as security contacts, water flow switches, manual call points etc. Conventional four wire smoke detectors can be monitored through their alarm contacts, wired to the module. In addition to transmitting the supervised state of the monitored device (normal, short or open), the full analogue measurement of the supervision is sent back to the panel.

#### Features

- Mounts in standard square junction box or SMB500.
- Analogue-addressable communications.
- Interface with sprinkler switches, manual call-points, 4 wire conventional detectors.
- Low standby current.
- Stable communication technique with high noise immunity.
- Visible LED controlled by panel to be off, blinking or latched on.

#### Specifications

Operating voltage : 15 to 32 VDC  
Standby current : 300µA (includes 100µA normal supervision current)  
LED current : 5mA current for visible LEDs latched on  
Relative humidity : 10% to 93%, non-condensing  
Operating temperature : -10°C to 60°C  
Dimensions : 110 mm x 100 mm x 33 mm (h x w x d)  
Weight : 150 g





## M500CHE Addressable Control Module

The M500CHE control module provides supervised monitoring of wiring to load devices that require an external power supply to operate, such as horns, strobes, bells etc.

### Features

- Control of sounders, strobes and bells.
- Monitoring of wiring for short circuit and open circuit faults.
- User configurable voltage free contact mode.
- Mounts in standard square junction box or SMB500.
- Analogue-addressable communications.
- Low standby current.
- Latching output drive circuit controlled by the panel command.
- Stable communication technique with high noise immunity.
- Visible LED controlled by panel to be off, blinking or latched on.

### Specifications

Operating voltage	: 15 to 32 VDC
Standby current	: 300 µA (includes 100 µA normal supervision current)
LED current	: 5 mA current for visible LEDs latched on
Relay contact rating	: • resistive: 2 A @ 30 VDC; • inductive: 300 mA @ 110 VDC 300 mA @ 120 VAC; 1A @ 30 VDC
Relative humidity	: 10% to 93%, non-condensing
Operating temperature	: -10°C to 60°C
Dimensions	: 33 mm x 100 mm x 110 mm (h x w x d)
Weight	: 150 g



## M500XE Short Circuit Isolator Module

The M500XE isolator module is an automatic switch that opens when the line voltage drops below four volts, indicating a short circuit. Isolator modules should be spaced between groups of sensors or modules in a loop to protect the rest of the loop. No more than 25 points between isolators are recommended.

## M512ME Conventional Zone Monitor Module

The M512ME conventional zone monitor module allows a zone of conventional detectors to be connected to the Algorinet analogue addressable system.

### Features

- Connection of conventional detectors to intelligent systems.
- Monitors open circuit and short circuit faults.
- Zone powered from the external 24 VDC PSU.
- Remote reset of conventional zone.
- Compatible with System Sensors' conventional detectors.
- Interfacing to optical beam detectors.
- Monitoring of external power supply.
- External fault input.
- Magnet test feature.
- Designed to meet the requirements of all major European approval bodies.

### Specifications

Communication line supply voltage	: 15 - 32 VDC
Communication line standby current	: 30 µA max. (Polling every 5 sec., external PSU)
Communication line standby current	: 5.1 mA max. (LED on, external PSU)
Conventional zone current limit	: 20 mA / 60 mA (selectable by break-off tab)
Maximum conventional zone voltage	: 25.5 VDC
External power supply voltage	: 18 - 32 VDC
Maximum line impedance	: 10 Ohm
Max. detector current (PSU Voltage >18 V)	: 2.5 mA
Max. detector current (PSU Voltage >20 V)	: 4 mA
Operating temperature	: -10°C to 60°C
Relative humidity	: 10% to 93%
Dimensions module	: 70 mm x 70 mm x 32 mm
Dimensions mounting plate	: 121 mm x 107 mm
Cable	: 3 mm <sup>2</sup> maximum
Weight	: 142 g



## FBF900-2 Fire Brigade Control Unit

The FBF900-2 fire brigade control unit is especially made for connection to the BC216-1 control panel, which contains default settings for this unit. It displays the status of the control panel and can control the panel in case of an alarm. The FBF900-2 is connected to the FWI2-1 fire brigade interface.

Operating voltage	: 24 V +/-15% DC
Quiescent current	: < 12 mA
Maximum current	: < 80 mA
Operating temperature	: -10°C to 50°C
IP rating	: 30
Maximum wire gauge	: 1.5 mm <sup>2</sup>
Housing	: grey white, RAL 9002
Dimensions	: 180 mm x 225 mm x 57 mm (h x w x d)
Weight	: 2000 g



## Analogue Addressable Smoke Detectors

All analogue addressable detectors are high quality fire detection devices, derived from the words most acclaimed, top of the line System Sensor series. Its price, performance and features set the industry's highest standards. Combined with the Algorinet panel, these detectors form a very sensitive and reliable fire alarm system.

### Core Features

- Low profile design in an attractive ivory housing.
- Addressable-analogue communications.
- Compatibility with the "Algorinet" control panels only.
- Remote annunciator LED output.
- Two alarm LEDs providing 360 degrees visibility.
- Rotary type, decade address switches.
- Low standby current.
- Stable communication technique with high noise immunity and false alarm verification algorithms.
- Tamper-resistant base (B501).
- Magnet test feature, panel "soft" test and drift compensation feature (from the panel).
- Very long MTBF time.

### 1700EC Low Profile Ionisation Smoke Detector

The 1700 EC ionisation smoke detectors use state-of-the-art sensing chambers coupled with high standards of reliability to provide early warning of developing fires. These detectors are designed for open area protection, in particular for detecting invisible fire products, undetectable by optical detectors. The exact location of each detector can be determined by setting the decade address switches therefore allowing selective maintenance when contamination reaches an unacceptable level.

### Features

- Dual chamber, unipolar design.
- Very low radiation element (Americum 241 < 0.5 MicroCurie or 18.5 kBq).
- Low standby current.
- Stable communication technique with high noise immunity.
- Easy chamber cleaning (wet or dry).
- Tamper resistant.
- Removal signalling.
- Built-in test device socket.



### Specifications

Operating voltage	: 15 to 32 VDC
Max. standby current	: 200 µA @ 24 VDC (no communication)
Max. average standby current	: 300 µA (one poll every 5 sec with LED blink enabled)
Max. alarm current (LED on)	: 6.5 mA @ 24 VDC
Relative humidity	: 10% to 93%, non-condensing
Operating temperature	: -10°C to 60°C <i>NOTE: do not install in locations where the normal ambient temperature range extends beyond 0°C to 50°C</i>
Dimensions	: 43 mm (installed in base); diameter: 102 mm
Weight	: 102 g
Base	: B501

### 2700ECM Low Profile Photoelectric Smoke Detector

The 2700ECM photoelectric detectors are plug-in type smoke detectors that combine a photoelectric sensing chamber with addressable-analogue dialogue type communications. These detectors are designed for open area protection.

### Features

- Very sophisticated patented chamber for light scattering smoke detection.
- Advanced false alarm rejection procedure
- Easy chamber cleaning (wet or dry).
- Alarm test from the panel as well as by the magnet activation.



### Specifications

Operating voltage	: 15 to 32 VDC
Max. standby current	: 230 µA @ 24 VDC (no communication)
Max. avg. standby current	: 300 µA (one poll every 5 sec. with LED blink enabled)
Max. alarm current (LED on)	: 6.5 mA @ 24 VDC
Relative humidity	: 10% to 93%, non-condensing
Operating temperature	: -10°C to 60°C

*NOTE: do not install in locations where normal ambient temperature range extends beyond 0°C to 50°C*

Dimensions	: 43 mm (installed in base); diameter: 102 mm
Weight	: 102 g
Base	: B501

### 6500ECM Fixed Temperature Thermal Detector

The 6500ECM is a fixed temperature detector utilising a state-of-the-art dual thermistor sensing circuit for fast response. These detectors are designed for open area protection. The 6500ECM has remote LED annunciator capability as well as two integral alarm LEDs to provide local visual indication of detector status. The 6500ECM includes a tamper feature that prevents removal from the base without the use of a tool. Each detector can be determined by setting the decade address switches.

#### Features

- Fixed temperature alarm (58°C).
- Dialogue communications with the panel.
- Stable communication technique with high noise immunity.
- Built-in test switch.

### Specifications

Operating voltage	: 15 to 32 VDC
Max. avg. standby current	: 200 µA @ 24 VDC (no communication)
Max. avg. standby current	: 300 µA (one communication every 5 sec. with LED blink enabled)
Max. alarm current (LED on)	: 6.5 mA current for visible LEDs latched on
Relative humidity	: 10% to 95%, non-condensing
Operating temperature	: -10°C to 43°C

*NOTE: not to be installed in locations where the normal ambient temperature range extends beyond 0°C to 43°C*

Threshold level	: 58°C
Dimensions	: 58 mm (installed in base); diameter: 102 mm
Base	: B501

### 6500REM Analogue Addressable Rate of Rise Thermal Detector

The 6500REM is a rate of rise temperature analogue addressable detector utilising a state-of-the-art dual thermistor sensing circuit for fast response. These detectors are designed for open area protection and should only be connected to control panels that use a compatible proprietary analogue addressable dialogue communication protocol for monitoring and control.

#### Features

- Rate of rise / fixed temperature response.
- Low standby current consumption.
- Analogue-addressable communications.
- Remote annunciator LED output.
- Two LEDs providing 360° visibility.
- Stable communication technique with high noise immunity.
- Tamper-resistant.
- Built-in test switch.

### Specifications

Operating voltage	: 15 to 32 VDC
Max avg. standby current	: 200 µA @ 24 VDC (no communication)
Max avg. standby current	: 300 µA (one communication every 5 sec with LED blink enabled)
Max. alarm current (LED on)	: 6.5 mA current for visible LEDs latched on
Relative humidity	: 10% to 95% relative humidity, non-condensing
Operating temperature	: -10°C to 43°C

*NOTE: do not install in locations where the normal ambient temperature range extends beyond 0°C to 43°C*

Sensitivity	: 58°C fixed temperature or 8°C/min rate of rise
Dimensions	: 41 mm (installed in base); diameter: 102 mm
Weight	: 150 g
Base	: B501





## LZR-1 Low Profile Analogue Addressable Laser Smoke Detector

The LZR-1 is an intelligent analogue addressable detector, which detects smoke in a very early stage of developing fire. The sensitivity of this detector is extremely high, 10 to 50 times higher than offered by the standard smoke detection technology. The LZR-1 uses a narrow, but very intense laser, which is activated by a laser diode, combined with a special lens and mirrors.

### Features

- Very accurate and fast smoke detection.
- Advanced laser technology.
- Attractive low profile housing.
- Analogue addressable communication protocol.
- A sensitivity of 0.01% obscuration per meter.
- Low standby current consumption.
- Easy and fast setting of each address.
- Two LEDs providing 360° visibility.
- Automatic remote test.

### Specifications

Operating voltage	: 15 to 32 VDC
Max standby current	: 230 µA @ 24 VDC (no communication)
Max avg. standby current	: 255 µA @ 24 VDC (one communication every 5 sec with LED blink enabled)
Max. alarm current	: 6.5 mA @ 24 VDC (LED <<ON>>)
Relative humidity	: 10% to 95% relative humidity, non-condensing
Operating temperature	: 0°C to 50°C
Dimensions	: 40 mm (installed in base); diameter: 102 mm
Weight	: 102 g
Base	: B501

## B501 Universal Plug-in Detector Base

This universal plug-in base is compatible with all analogue addressable detectors. It has four terminals and no electronic elements. The base is provided with an anti removal break-off tab, which can be enabled by the installer.

### Specifications

Diameter	: 102 mm
Mounting	: 50 mm, 60 mm, and 70 mm centres

## FTX-P1 Filtrex™ Analogue Addressable Optical Smoke Detector

System Sensors' Filtrex™ smoke detector provides early warning smoke detection in difficult environments where traditional smoke detectors are not practical. Using a small air intake fan and a high-density replaceable filter, air and smoke are drawn into a photoelectric sensing chamber while dust is removed. This feature allows Filtrex to protect in difficult applications, such as textile or paper mills, where previously only thermal detectors could be used. A second non-removable filter protects the detector from dust whilst the primary filter is being replaced.

### Features

- Two-stage, high-density filter removes particles down to 25 microns.
- Air delivery system is separately powered and fully supervised.
- Filter is easily field replaceable.
- Approved for use in high airflow (20m/s)
- Optional remote LED.
- Rotary decade address switches.
- Additional replacement filter RF-FTX available.

### Specifications

Operating voltage (detector)	: 15 to 32 VDC
Operating voltage (fan)	: 15 to 30 VDC
Current consumption	: 230 µA @ 24 VDC (without communication) 285 µA @ 24 VDC (one communication every 5 sec., LED enabled)
Air delivery system	: 6 mA standby; 60 mA when checking for smoke (5 sec. on, 30 sec. off) 80 mA when checking for proper airflow (15 sec. on every 4 hrs.)
Operating temperature	: -10°C to 60°C
Operating altitude	: -300 to 1200 m
Relative humidity	: 10% to 93% relative humidity
Dimensions	: 89 mm (installed in base); diameter 102 mm
Weight	: 207 g

## B524FTXE Filtrex Plug-in Detector Base

This base is compatible with the Filtrex analogue detector and contains terminals to power the Filtrex's built-in fan. The base is provided with an anti removal break-off tab, which can be enabled by the installer.

### Specifications

Diameter	: 102 mm
Mounting	: 50 mm and 60 mm centres

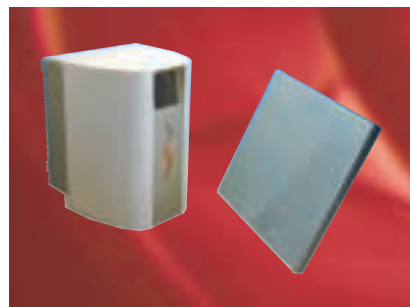


## 6200 Analogue Addressable Laser Beam Detector

The 6200 beam detector is an advanced analogue-addressable device that can be connected and powered directly from the loop. An integrated transmitter-receiver with a high efficiency reflector limits the wiring requirements to one end only and with a range of up to 100 metres, the 6200 Beam Sensor offers twice the coverage of other reflector beams.

### Features

- Microprocessor control.
- Increased intelligence gives improved fire detection and a reduction of the number of unwanted alarms caused by environmental influences.
- Special algorithms automatically compensate for contamination of the lens and reflector surfaces, providing 'Drift Compensation' similar to that incorporated in the photo and photo-Thermal variants.
- Automatic adjustment of the alarm threshold guarantees consistent alarm sensitivity.
- Ideal for protection of very high and/or large open areas.
- Integral horizontal and vertical adjustment.
- Quality assured; independently certified to EN54-12 and EN60825-1, certified by VdS.



### Specifications

Range	: 10 - 100 m
Power supply	: 15 - 28 VDC (via Intelligent loop)
Power consumption	: 3.2 mA @ 20 VDC (in standby); 12 mA @ 20 VDC (in alarm); 12 mA @ 20 VDC (in fault); 12 mA @ 20 VDC (in contamination state) < 40 mA @ 20 VDC (in installation mode)
<i>NOTE: no more than one 6200 per loop should be put into the installation mode at one time</i>	
Operating temperature	: -10°C to 55°C (operating); -20°C to 70°C (storage);
Relative humidity	: <95%, non-condensing
Protection number	: IP41
Dimensions	: 195 mm x 150 mm x 155 mm (h x w x d)
Housing	: grey, eggshell finish ABS
Weight	: 1000 g

### Accessories

- 6200-OBK : orientation bracket
  - 6200 Filter : alarm test filter
  - REFL20 : short to medium range reflector (10 m - 30 m)
  - REFL60 : medium to long range reflector (30 m - 100 m)
- Note: when ordering the 6200 Beam detector, please specify which reflector you require.*

## Accessories

### M500K Addressable Glassbreak Manual Call Point

The M500K is a dedicated addressable call point for installation on a two wired communication circuit providing both signalling of alarm to the monitoring control panel and local LED indication of activation.

The M500K may be flush mounted to compatible electrical boxes, however, it is advised that the terminal tray (ETT-P) is used to effectively terminate field wiring to the call point. The ETT-P may be used with most standard recessed electrical boxes or the SR3T surface mount box.

### Features

- Two wire connection for easy installation.
- Suitable for flush mounting or surface mounting.
- Simple rotary decade address setting.
- Integral LED controlled from panel (blinks for valid polling, lights for alarm).
- Not intended for use in an externally exposed or hazardous location.

### Specifications

Minimum operating voltage	: 15 VDC
Maximum operating voltage	: 32 VDC
Standby current:	: 300 µA (no communication) / 375 µA (1 communication per 5 s)
Alarm current	: 5 mA
Housing	: red thermoplastic
Dimensions	: 86 mm x 86 mm x 52 mm (h x w x d)
Test key	: included
Glass	: excluded



### SR3T Surface Mount Box

Red thermoplastic, surface mount box for the MK500 call point.

### KG-1 Spare Glasses

Glass replacement; packed per 5 pieces.

The glass is laminated with transparent foil and has a diamond cut line to make breaking easier and safe.

### EMA24ALR Addressable Multi-alert Sounder

The EMA24ALR addressable sounders are designed for connection to analogue addressable fire alarm systems. The EMA24ALR two wire loop-powered sounders receive their power directly from the communication loop, and can be controlled via the digital command from the panel.



## Features

- Individual control of sounders from addressable communication loop.
- Loop powered version and externally powered version available.
- Three volume settings selectable by means of DIP-switch: 100 dBA, 93 dBA and 87 dBA settings.
- 5 Tones available.
- Indoor use.

## Specifications

Communication loop voltage	: 15 to 32 VDC
Current consumption (max)	: 600 µA (sounder off)
Current consumption (max)	: 2.5 mA (low volume)
Current consumption (max)	: 5 mA (medium volume)
Current consumption (max)	: 13 mA (high volume)
Output power	: 87 dBA ± 3 dB (low volume); 93 dBA (medium); 100 dBA (high)
Operating temperature	: -10°C to 60°C
Relative humidity	: 10% to 93%
Dimensions (installed on base)	: 75 mm x 124 mm x 92 mm (h x w x d)
Weight	: 180 g
Compatible base	: ESBR (colour red)

## ESBR Mounting Base

Low profile base for the EMA24ALR sounder.  
Can be used for both flush and surface mounting.

## DBS24ALW Addressable Detector Base Sounder

The DBS24ALW addressable sounders are designed to be connected to analogue addressable fire alarm loops directly in a two-wire configuration, taking the power directly from the loop, in a similar way as detectors do. The unique shape allows for wall mounting as well as under-the-detector mounting. Sound on/off is controlled via the addressable communication protocol and programmable in the panel as an output.

## Features

- Individual control of sounders from addressable communication loop.
- Three volume settings selectable by means of DIP-switch: 100 dBA, 93 dBA and 87dBA settings.
- 5 Tones available.
- Separate terminals for in-out wiring.
- Low profile white ABS housing.
- Indoor use.

## Specifications

Communication loop voltage	: 15 to 32 VDC
Current consumption	: 600 µA (sounder off)
Current consumption (low vol.)	: 4 mA (max.)
Current consumption (medium vol.)	: 9 mA (max.)
Current consumption (high vol.)	: 13 mA (max)
Output power	: 80 dBA ± 3 dB (low volume)
Output power	: 85 dBA ± 3 dB (medium volume)
Output power	: 90 dBA ± 3 dB (high volume)
Operating temperature	: -10°C to 60°C
Relative humidity	: 93% at 40°C
Dimensions	: 117 mm (installed in base); diameter: 30 mm
Mounting holes	: 50 - 60 mm
Weight	: 200 g

## Power Supplies

### General Specifications

Output voltage	: 27.2 VDC (adjustable)
Operating temperature	: -10° to 40° C
Dimensions	: 315 mm x 325 mm x 110 mm (h x w x d)

### Power Supply PSU 24/1

Output current	: max. 1 A total
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### Power Supply PSU 24/2

Output current	: max. 2 A total
Internal LEDs	: fault (red); low battery (red)

### Power Supply PSU 24/3

Output current	: max. 3 A total
Internal LEDs	: fault (red); low battery (red)

### Power Supply PSU 24/5

Output current	: max. 5 A total
Internal LEDs	: fault (red); low battery (red)



### Number of loop-powered sounders on a typical loop

The maximum number of loop-powered sounders, which can be connected to a loop depends on the loop resistance, the panel drive capability and the drive voltage of the panel. For further details, please see the installation manual.



For further information, please contact:

